



Air Quality Permitting Statement of Basis

December 18, 2003

Tier I Operating Permit No. T1-030413

Sinclair Oil Corp., Burley

AIRS Facility No. 031-00026

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**FINAL
TIER I OPERATING PERMIT MODIFICATION**

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ACRONYMS, UNITS, and CHEMICAL NOMENCLATURE

AIRS	Aerometric Information Retrieval System
DEQ	Idaho Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
HAPs	hazardous air pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
Sinclair	Sinclair Oil Corp.
SVE	soil-vapor extraction
T/yr	tons per year
US gal/year	U.S. gallons per year
VOCs	volatile organic compounds

PUBLIC COMMENT / AFFECTED STATES / EPA REVIEW SUMMARY

A 30-day public comment period for the Sinclair Oil Corp. (Sinclair) draft Tier I operating permit was held from in accordance with IDAPA 58.01.01.364 of the *Rules for the Control of Air Pollution in Idaho*. The comment period started on September 18, 2003, and closed on October 20, 2003. No comments were submitted by any entities.

IDAPA 58.01.01.008.01 defines *affected states* as: "*All states: whose air quality may be affected by the emissions of the Tier I source and that are contiguous to Idaho; or that are within 50 miles of the Tier I source.*"

A review of the site location information included in the permit application indicates that the facility is located within 50 miles of a state border. Therefore, the states of Nevada and Utah were provided an opportunity to comment on the draft Tier I operating permit. No comments were received from any affected state.

On November 14, 2003, the Idaho Department of Environmental Quality (DEQ) issued a proposed operating permit and the statement of basis to the U.S. Environmental Protection Agency (EPA) for their 45-day review period. On December 17, 2003, DEQ received a letter from EPA stating that the proposed permit was eligible for issuance.

1. PURPOSE

The purpose of this memorandum is to explain the legal and factual basis for this Tier I operating permit modification in accordance with IDAPA 58.01.01.362 of the *Rules for the Control of Air Pollution in Idaho*.

2. SUMMARY OF EVENTS

On May 22, 2002, DEQ received a submittal from Sinclair requesting revisions to Tier I Operating Permit No. 031-00026, dated July 4, 2002. The submittal included revised Tier I application materials to update the facility's existing Tier I permit application (initially submitted on June 26, 1995, and last updated on September 8, 1998).

The requested revisions involved updating emissions and throughput limits in the Tier I permit and minor typographical error corrections. The changes in emissions and throughput limits are due to an update in the emissions estimation software (i.e., EPA's TANKS program) and emissions factors used by the facility. No physical change or modification has occurred at the facility.

It should be noted that the facility was issued Tier II Operating Permit No. 031-00026 after Tier I Operating Permit No. 031-00026 was issued, and contains different emissions and/or throughput limits. The Tier II permit was issued on October 30, 2003, as a permit renewal project that included emissions and throughput limits based on the updated TANKS software and emissions factors (i.e., the Tier II permit contained different limits than the Tier I permit issued on July 4, 2002). After this Tier I modification project is completed, the Tier I permit will contain emissions and throughput limits as they appear in the current Tier II permit.

A draft version of the modified Tier I permit was issued to Sinclair for a 10-day facility review period on July 31, 2003. Comments from the facility were received by DEQ on August 4, 2003. These comments indirectly pointed out a typographical error in Tier II Operating Permit No. T2-030417; therefore, DEQ revised and reissued that permit as Tier II Operating Permit No. T2-030419, on August 20, 2003. After issuance of the revised Tier II permit, DEQ revised the draft Tier I permit in accordance with Sinclair's comments and the new Tier II permit.

A public comment period for the draft Tier I permit was held from September 18, 2003 through October 20, 2003. No comments were received from any entities, so a proposed permit was prepared for EPA's 45-day review period on October 22, 2003. On December 17, 2003, DEQ received written notice from EPA, stating that the permit modification was eligible for issuance. A final Tier I permit and this statement of basis was then prepared for final issuance.

3. PERMIT HISTORY

This section has been included in the memorandum in order to clarify and document the permit history of the facility.

April 21, 1993	A below-regulatory-concern exemption was issued to Sinclair for a modification project.
August 23, 1996	Tier II Operating Permit No. 031-00026 was issued to the facility to restrict facility-wide hazardous air pollutant (HAP) emissions rates below the HAP major-status threshold (i.e., 25 T/yr).

July 4, 2002	Tier I Operating Permit No. 031-00026 was issued to the facility. The facility was subject to Tier I permitting requirements due to a potential to emit volatile organic compounds (VOCs) at rates greater than 100 tons per year (T/yr).
October 30, 2002	Tier II Operating Permit No. 031-00026 was issued to the facility. This permit was a renewal of the previous Tier II permit, and also served to limit aggregated HAP emissions below major-source thresholds.
January 7, 2003	An exemption concurrence determination was issued to Sinclair for a soil vapor extraction (SVE) system and associated characterization activities.
April 10, 2003	An exemption concurrence determination was issued to Sinclair for an above-ground transfer piping system.
July 16, 2003	Tier II Operating Permit No. T2-030417 was issued to Sinclair. This is a revision of the permit issued on October 30, 2002, to correct typographical errors in the permit.
August 20, 2003	Tier II Operating Permit No. T2-030419 was issued to Sinclair. This is a revision of the permit issued on July 16, 2003, to correct a typographical error in the permit.

4. REGULATORY ANALYSIS

This section of the technical analysis specifically outlines changes made to Tier I Operating Permit No. 031-00026, dated July 4, 2002 (hereafter referred to as the existing permit). In accordance with IDAPA 58.01.01.382.01.a, the permit changes are being processed as a significant modification, due to some increases in permitted emissions limits. The revised permit will be reissued as Tier I Operating Permit No. T1-030413 (hereafter referred to as the revised permit).

This analysis does not address technical or regulatory aspects of the original permit conditions developed for the existing permit; these aspects are addressed in the technical memorandum for the existing permit. It should also be noted that, as a result of this permit modification, minor numbering and format changes have been made to the revised permit; however, these changes are inconsequential and are not specifically addressed in this analysis.

All references to specific permit condition numbers in the catchlines of Section 4 of this memorandum refer to condition numbers in the existing permit.

4.1 Fugitive Emissions Monitoring Requirements – Permit Condition 1.4

Sinclair's submittal notes that the timeframe for fugitive emissions inspections in Permit Condition 1.4 of the existing Tier I permit conflicts with the timeframe for fugitive emissions inspections in Permit Condition 2.4 of the current Tier II permit. Sinclair has requested that the Tier I permit be revised to require monthly inspections as required in the Tier II permit.

Based on the Tier II permit and the revised Tier I application materials, DEQ concurs with Sinclair in this matter, and Permit Condition 1.4 of the Tier I permit has been revised to require monthly inspections.

4.2 Visible Emissions Monitoring Requirements – Permit Condition 1.8

Sinclair's submittal notes that the timeframe for visible emissions inspections in Permit Condition 1.8 of the existing Tier I permit conflicts with the timeframe for visible emissions inspections in Permit Condition 2.8 of the current Tier II permit. Additionally, Sinclair asserts that there "...are no sources at the facility which produce an opacity plume." Consequently, Sinclair requests that no facility-wide visible emissions inspections be required (i.e., deletion of Permit Condition 1.8 in the Tier I permit and Permit Condition 2.8 in the current Tier II permit).

Although DEQ agrees that opaque emissions are unlikely to be generated from any of the sources at the facility under normal operating conditions, IDAPA 58.01.01.625 requires "any point of emission" to comply with the opacity standard. The only exemptions or exceptions to this requirement are listed in IDAPA 58.01.01.625.01 and .04, respectively, and do not appear to apply to the sources at Sinclair's facility. Consequently, sources at the facility are subject to the opacity requirement, and Permit Conditions 1.8 and 2.8, or an equivalent alternative, are currently required to demonstrate compliance with the opacity standard.

Sinclair's submission does not propose any alternative compliance demonstration for Permit Conditions 1.8 or 2.8. Therefore, the inspection requirements of have been retained as a practical method for demonstrating compliance with the opacity standard.

Based on the Tier II permit and the revised Tier I application materials, Permit Condition 1.8 of the Tier I permit has been revised to coincide with the quarterly inspection timeframe contained in the Tier II permit.

4.3 Emissions Limits – Permit Conditions 2.1, 2.2, 3.1, 3.2, 4.1, 4.2, 5.1, and 5.2

As discussed previously, changes in emissions estimation software and emissions factors has resulted in a change in emissions limits contained in the existing Tier I permit. Table 4.1 shows a summary of the emissions limits changes.

Table 4.1. SUMMARY OF REVISED EMISSIONS LIMITS

Source	VOC Emissions Limits (T/yr)		HAP Emissions Limits (T/yr)	
	Existing Permit	Revised Permit	Existing Permit	Revised Permit
Tank Nos. 301, 304, 311, and 321	9.04 ^a	60.68	0.388 ^a	1.744
Tank Nos. 302, 305, 306	1.23 ^a	1.17	0.03 ^a	0.039
Prover tank	0.21	0.26	0.006	0.007
Transmix tank	n/a	0.27	n/a	0.007
Loading rack	286.38 ^b	360.86 ^b	7.726 ^b	9.525 ^b

^aEmissions limits for these sources were not aggregated in the existing permit (i.e., each tank had an individual limit), but are now aggregated in the revised permit. The total summation of each individual tank limit is shown in this table.

^bEmissions limits for the loading rack are based on fuel type loaded, in both the existing and revised permits. The summation of the limits for each fuel type is shown in this table.

It should be noted that, prior to this permit modification, the Transmix tank was classified as an insignificant source. However, this unit was permitted in Tier II Operating Permit No. 031-00027, dated October 30, 2002, and consequently can no longer be classified as insignificant (refer to IDAPA 58.01.01.317.01).

4.4 Throughput Limit for Transmix Tank

As previously noted, prior to this permit modification, the Transmix tank was classified as an insignificant source. However, this unit was permitted in Tier II Operating Permit No. 031-00027, dated October 30, 2002, and consequently can no longer be classified as insignificant (refer to IDAPA 58.01.01.317.01). The new throughput limit is shown in Table 4.2.

Table 4.2. SUMMARY OF REVISED THROUGHPUT LIMITS

Source	Throughput Limits (US gal/yr)	
	Existing Permit	Revised Permit
Transmix tank	n/a	38,080

The total volumetric throughput for other permitted sources has not been changed; however, the revised permit does place aggregated limits on each of the sources in each emissions unit (e.g., Tank Nos. 301, 304, 311, and 321 have one inclusive throughput limit). This is because the current Tier II permit revised source-specific throughput limits (contained in the previous Tier II permit) to aggregated throughput limits.

5. FEES

Sinclair's Burley facility is a major facility as defined by IDAPA 58.01.01.008.10; therefore, registration and registration fees apply in accordance with IDAPA 58.01.01.387. This Tier I modification project is subject to the provisions of IDAPA 58.01.01.389.06.b.

6. RECOMMENDATIONS

Based on the Tier I application and review of state rules and federal regulation, staff recommends that DEQ issue modified Tier I Operating Permit No. T1-030413 to Sinclair for their Burley facility as required by IDAPA 58.01.01.366.

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